



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,948	11/27/2001	Paul Ranft	H 3516 PCT/US	9265
423	7590	03/02/2004	EXAMINER	
HENKEL CORPORATION THE TRIAD, SUITE 200 2200 RENAISSANCE BLVD. GULPH MILLS, PA 19406			GOFF II, JOHN L	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,948

Applicant(s)

RANFT ET AL.

Examiner

John L. Goff

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on 11/12/03. The previous 35 USC 102 rejections are withdrawn in view of applicants amendment.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 7-11 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaser et al. (U.S. Patent 5,350,553) in view of either Schubert et al. (PCT WO 96/20252 with U.S. Patent 5,776,406 used as a translation) or Kamata et al. (JP 05105805 and see also the abstract and machine translation).

Glaser et al. disclose a method for producing a smart card comprising providing a support film in a mold, placing an electronic circuit chip on the support film, and injecting adhesive into the mold to encapsulate the electronic circuit chip and form a smart card. Glaser et al. teach any

Art Unit: 1733

suitable injection molding adhesive can be used (Figure 1 and Column 1, lines 7-10 and Column 3, lines 40-44 and Column 6, lines 48-66). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the adhesive taught by Glaser et al. a thermoplastic hot melt adhesive having a low viscosity as shown for example by either Schubert et al. or Kamata et al. as this type of adhesive was well known in the art for having good performance properties in the encapsulation of electronic components.

Regarding claims 8-10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine/optimize the injection molding temperature and pressure as a function of the molding adhesive used, the quality of smart card produced, etc. as it would have required nothing more than ordinary skill and routine experimentation. Further, it is noted Schubert et al. teach using an injection molding temperature of 70 to 200°C and an injection molding pressure of 1 to 60 bar.

Schubert et al. are directed to a hot melt adhesive useful for the encapsulation of components such as electronic components (e.g. electronic circuits) by injection molding. Schubert et al. teach the hot melt adhesive comprises polyurethane and thermoplastic polymers such as polyester, polyethylene/vinyl acetate, etc. Schubert et al. teach the hot melt adhesive has a viscosity less than 100 Pa s. Schubert et al. teach a method for encapsulating the electronic component comprising providing the component in a mold and injecting into the mold the hot melt adhesive under an injection molding temperature of 70 to 200°C and an injection molding pressure of 1 to 60 bar. Schubert et al. teach the hot melt adhesive has good performance properties such as heat resistance, resistance to chemicals, good adhesion, etc. (Column 2, lines

Art Unit: 1733

12-18 and 63-65 and Column 7, lines 21-23 and Column 8, lines 50-54 and Column 9, lines 16-19 and Column 10, lines 50-67).

Kamata et al. are directed to a thermoplastic hot melt adhesive used for embedding electronic parts by injection molding. Kamata et al. teach the hot melt adhesive comprises polyester type hot melt adhesive. Kamata et al. teach the hot melt adhesive has a viscosity of 50 to 5,000 P (i.e. 5 to 500 Pa s). Kamata et al. teach the hot melt adhesive has good performance properties such as heat resistance, resistance to peeling, etc. (See abstract).

5. Claims 7-10 and 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goetzendorfer et al. (EP 649719 and see also the abstract) in view of either Schubert et al. (described above in paragraph 4) or Kamata et al. (described above in paragraph 4).

Goetzendorfer et al. disclose a method for producing smart cards comprising providing an electronic module on a thermoplastic adhesive film, placing the film in a mold, and injecting additional thermoplastic adhesive into the mold to encapsulate the module and form a smart card. Goetzendorfer et al. teach the thermoplastic adhesive film and the injected thermoplastic adhesive are the same (See abstract). Goetzendorfer et al. are silent as to a particular thermoplastic adhesive. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the thermoplastic adhesive taught by Goetzendorfer et al. a thermoplastic hot melt adhesive having a low viscosity as this type of adhesive was well known in the art for having good performance properties in the encapsulation of electronic components as shown for example by either Schubert et al. or Kamata et al.

Regarding claims 8-10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine/optimize the injection molding temperature and

Art Unit: 1733

pressure as a function of the molding adhesive used, the quality of smart card produced, etc. as it would have required nothing more than ordinary skill and routine experimentation. Further, it is noted Schubert et al. teach using an injection molding temperature of 70 to 200°C and an injection molding pressure of 1 to 60 bar.

6. Claims 7-10 and 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tagami (JP 09240179 and see also the abstract and machine translation) in view of either Schubert et al. (described above in paragraph 4) or Kamata et al. (described above in paragraph 4).

Tagami discloses a method for producing smart cards comprising providing an integrated circuit on a thermoplastic adhesive film, placing the film in a mold, and injecting additional thermoplastic adhesive into the mold to encapsulate the circuit and form a smart card. Tagami teaches the thermoplastic adhesive film and the injected thermoplastic adhesive are the same (See abstract and paragraph 11 of the machine translation). Tagami teaches any thermoplastic adhesive can be used. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the thermoplastic adhesive taught by Tagami a thermoplastic hot melt adhesive having a low viscosity as this type of adhesive was well known in the art for having good performance properties in the encapsulation of electronic components as shown for example by either Schubert et al. or Kamata et al.

Regarding claims 8-10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine/optimize the injection molding temperature and pressure as a function of the molding adhesive used, the quality of smart card produced, etc. as it would have required nothing more than ordinary skill and routine experimentation. Further, it is

Art Unit: 1733

noted Schubert et al. teach using an injection molding temperature of 70 to 200°C and an injection molding pressure of 1 to 60 bar.

Response to Arguments

7. Applicant's arguments filed 11/12/03 have been fully considered but they are not persuasive.

Applicant argues "Claims 7-10, 13, and 16 stand rejected under 35 U.S.C. 102(b) as allegedly anticipated by PCT Application No. WO 96/20252 (the 252 application) with this application being represented by U.S. Patent No. 5,776,406 (the 406 patent) as a translation for German language PCT application. While not agreeing with the rejection, Applicants have amended the "card body" language in claim 7 to read "transponder or smart card body." The 406 patent, however, does not disclose or suggest a process for the production of smart cards or transponders. Furthermore, the example in the 406 patent is directed to the production of PVC cable. Such an end use is remote from the instant claims. The standard for anticipation under 102 is one of strict identity and, as discussed above, the disclosure of the 406 patent falls well short of this standard. Applicants respectfully request reconsideration and withdrawal of the rejection."

In view of applicants amendment the 35 USC 102 rejection over the 406 patent is withdrawn.

Applicant further argues "Claims 7 and 16 stand rejected under 35 U.S.C. 102(b) as allegedly anticipated by JP 05105805 (the 805 application). The 805 application is directed to a process that requires fillers such as silica or glass fiber (see, for example, paragraph 0012 of the translation). Such fillers are not required by the instantly claimed inventions. For at least this reason, the rejection falls short of the strict identity requirement. Applicants respectfully request reconsideration and withdrawal of the rejection."

In view of applicants amendment the 35 USC 102 rejection over the 805 application is withdrawn.

Applicant further argues "Claims 7-11 and 13-18 stand rejected as allegedly obvious over U.S. Patent No. 5,350,553 (the 553 patent) in view of the 252 application or the 805 application. The 553 patent, while being directed to smart cards, does not show or suggest a process within the Applicant's instant claims. It is merely part of the art whose

Art Unit: 1733

shortcomings the Applicant's invention overcomes. As discussed above, the 805 application requires use of certain filler material not required by the instant invention. As such, even if one were to combine the teaching of the 553 patent with those of the 805 application, one would not arrive at any claimed invention."

It is noted the claims do not exclude the use of a molding adhesive having filler material such that the rejection of the 553 patent in view of the 805 application is proper.

Applicant further argues "Nothing in the 553 patent teaches or suggests use of the adhesives of the instant inventions. The Office Action appears to rely on a statement in the 553 patent that indicates any suitable injection molding adhesive can be used. At most, this statement is intended to include known smart card adhesives within the scope of the invention. The 406 patent and the 805 application are not directed to smart cards. As such, absent the Applicant's teaching one skilled in the art would lack to required motivation to make the combination asserted by the Office. Applicants respectfully request reconsideration and withdrawal of the rejection.

Claims 7-10 and 12-18 stand rejected as allegedly obvious over JP 09240179 (the 179 application) in view of the 252 application or the 805 application. For reasons entirely analogous to those discussed for the 553 patent, Applicants assert that the rejection should be withdrawn.

It is noted the 553 patent teaches a process for manufacturing a smart card by encapsulating an electronic circuit chip with (as noted above by applicant) any suitable injection molding adhesive. The 406 patent and the 805 application are cited to show injection molding adhesives known in the art for encapsulating electronic components such that these molding adhesives are analogous to the molding adhesive of the 553 patent, and one of ordinary skill in the art would be motivated to combine the references for the reasons given above in paragraph 4. The same arguments apply to the 179 application.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff
February 20, 2004



JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300